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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/755,471	01/13/2004	Hideyuki Nakamura	Q78638	9936
23373	7590	11/23/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			TRAN, LY T	
			ART UNIT	PAPER NUMBER
			2853	

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/755,471

Applicant(s)

NAKAMURA, HIDEYUKI

Examiner

Ly T. TRAN

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/13/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-6, 9-12 are rejected under 35 U.S.C. 102(b) as being anticipate by Kenjiro et al (USPN 2000-001044).

With respect to claim 1, Kenjiro discloses a transfer medium (1) for ink jet recording which comprises a base material (element 11), a cushion layer (element 14), a release layer (element 13) having a thickness of from 0.02-10  $\mu\text{m}$  ([0020]) and a transfer layer (element 12) having thickness of from 0.02-20  $\mu\text{m}$  ([0021]).

With respect to claims 2-4, since Kenjiro discloses the release layer is made of as the same material as the present invention such as polyamide or polyvinyl chloride ([0021]), the permeability of the release layer should be at from 400 to 700 nm is 70%, or 80% or 90% or more

With respect to claim 5, since Kenjiro discloses the transfer layer is made of the same material as the present invention such as polyvinyl alcohol or clay or talc, the transfer layer should be capable of absorbing an ink solvent.

With respect to claim 6, since Kenjiro discloses the cushion layer is made of the same material as the present invention such as acrylic resin, the cushion layer should be capable of absorbing an ink solvent.

With respect to claim 9, Kenjiro discloses the release layer and the transfer layer are simultaneously transferred onto a transfer substrate (fig.2).

With respect to claims 10-12, since Kenjiro discloses the transfer layer is made of the same material as the present invention such as polyester, polyamide or polyvinyl alcohol ([0021]), the transfer layer should comprises matt grains and having a thickness of 0.02-1  $\mu\text{m}$  and comprises a thermoplastic resin.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenjiro (JP 2000-001044) in view of Onishi et al (USPN 5,955,167).

Kenjiro fails to teach an interlayer adhesion between the release layer and the cushion layer and is from 0.5 to 400 g/cm or from 2 to 50 g/m.

Onishi teaches an interlayer adhesion between the release layer and the cushion layer and is from 0.5 to 400 g/cm or from 2 to 50 g/m (column 7: line 43-45, Column 2: line 50-55).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the interlayer adhesion as taught by Onishi. The motivation of doing is to adhere the layers together.

3. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenjiro (JP 2000-001044) in view of Sato et al (USPN 6,652,928).

Kenjiro fails to teach the thermoplastic resin has a particle size of 0.5-100 $\mu$ m and has a melting point of from 70-200  $^{\circ}$ C.

Sato teaches the thermoplastic resin has a particle size of 0.5-100 $\mu$ m and has a melting point of from 70-200  $^{\circ}$ C.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a particle size of 0.5-100 $\mu$ m and has a melting point of from 70-200  $^{\circ}$ C as taught by Sato. The motivation of doing so is obtain a clearer image.

4. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenjiro (JP 2000-001044) in view of Martin et al (USPN 2004/0041894).

With respect to claim 15, Kenjiro discloses an image formation method comprising a transfer medium (1) for ink jet recording which comprises a base material (element 11), a cushion layer (element 14), a release layer (element 13) having a

Art Unit: 2853

thickness of from 0.02-10  $\mu\text{m}$  ([0020]) and a transfer layer (element 12) having thickness of from 0.02-20  $\mu\text{m}$  ([0021]) with the use of an ink containing a pigment or dye, locating face to face a transfer substrate and the transfer face of the transfer medium and stripping off the transfer medium from the transfer substrate to thereby transfer the transfer layer and the release layer onto the transfer substrate (fig.2)

With respect to claim 16, Kenjiro discloses the release layer and the transfer layer are simultaneously transferred onto a transfer substrate (fig.2).

Kenjiro discloses the claimed invention except that using only pressure instead of heating and pressurizing. Martin shows that pressurizing and the combination of heating and pressurizing is an equivalent structure known in the art. Therefore, because these pressurizing and the combination of heating and pressurizing were art recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the combination of heating and pressurizing for pressurizing the same purpose such as transfer the image.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly T. TRAN whose telephone number is 571-272-2155. The examiner can normally be reached on M-F (7:30am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lt  
November 17, 2005



**Stephen D. Meier**  
Primary Examiner